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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/577,476 | 05/24/2000 | Raymond V. Damadian | DAMADIAN 3.0-076 | 4571 |

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| EXAMINER |
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TUGBANG, ANTHONY D

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| ART UNIT | PAPER NUMBER |
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3729

16

DATE MAILED: 03/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/577,476

Applicant(s)

DAMADIAN, RAYMOND V.

Examiner

A. Dexter Tugbang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 and 25-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The applicant(s) amendment filed 12/29/03 (Paper No. 15) has been fully considered and made of record.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

3. Claims 1-6 and 25-32 continue to stand as being withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.

Claim Rejections - 35 USC § 102

4. Claims 7-12, 14 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Sasaki et al.

Sasaki discloses a method of making pieces comprising: providing an intermediate element (in Fig. 1a) including a plurality of ferromagnetic rods 11 with a dielectric material (molding material 12) therebetween; slicing the intermediate element along the lengthwise direction to form shim pieces each having a thickness direction corresponding to the lengthwise direction of the rods in the intermediate element (see sequence of Figs. 1b-1c and col. 4, lines 39-41), which meets all of the limitations of the claimed manufacturing method.

Regarding Claims 8-12, Sasaki further teaches assembling the shim pieces with a magnet pole, i.e. closed magnetic circuit (at col. 2, lines 46-49), in the form of a substantially closed ring with a gap and having a generally accurate shape (see Figs. 2c and 2d).

Regarding Claim 14, Sasaki teaches an additional step of trimming after slicing, to alter the profile of the shim pieces (see col. 5, lines 2+).

Regarding Claim 19, Sasaki shows that the rods are covered with a rectangular shaped dielectric sleeve 12 (in Fig. 1b).

Claim Rejections - 35 USC § 103

5. Claims 13, 15-18 and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al in view of Rudd et al 3,849,878.

Sasaki discloses the claimed manufacturing method as relied upon above.

Regarding Claims 13, 15 and 16, Sasaki does not specifically teach the use of a saw to perform the slicing or an abrasive jet or milling device to perform trimming.

Regarding Claims 17 and 18, Sasaki does not teach cleaning or removing other contaminants.

Regarding Claims 20-23, Sasaki does not teach the use of a mold to form the dielectric, curing the dielectric, as well as the compositions of an epoxy or fiberglass.

Rudd teaches a manufacturing process that includes the use of a saw (see col. 3, lines 18-20) to perform slicing and a mold (see col. 4, line 10) to form the dielectric, cleaning and removing contaminants (see col. 2, lines 58+), the use of an epoxy or fiberglass as dielectric materials (see col. 3, lines 3-12), as well as curing the dielectric materials (see col. 3, lines 61+),

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all for the benefits of easier handling and a greater speed of manufacturing shim pieces (see col. 4, lines 35-43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Sasaki by including the manufacturing process of Rudd, to positively provide easier handling and a greater speed of manufacturing shim pieces.

Regarding Claims 15, 16 and 24, it would have been an obvious matter of design choice to choose any desired means for slicing or trimming and cross-sectional shape of the rods, since applicant has not disclosed that the claimed abrasive jet, milling machine, or hexagonal cross-sectional shape, solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the means for slicing and trimming and cross-sectional shape taught by either Sasaki et al or Rudd et al. Furthermore, the claimed means for slicing and trimming and cross-sectional shape of the rods, as recited in either of Claims 15, 16 and 24, does not provide any manipulative difference in the claimed manufacturing method as compared to the prior art above.

Response to Arguments

6. Applicant's arguments in the amendment filed 12/29/03 (Paper No. 15) have been fully considered but have not been deemed to be found as persuasive.

In regards to the merits of Sasaki et al, the applicant asserts that Sasaki does not teach, "providing an intermediate element including a plurality of elongated ferromagnetic rods" (lines 3-4 of Claim 7).

The examiner most respectfully disagrees. For further clarification, the core wire 11 of Sasaki includes an intermediate element, which for example in Figure 2a, can be read as the cross-hatched core material 15 that is surrounded by a magnetic material 14. The magnetic material is considered to be ferromagnetic, because Sasaki specifically suggests that ferrite materials or ferrite cores can be used as the magnetic materials (see col. 1, lines 21+). So the core wire 11 of Sasaki is equivalent to having an intermediate element of core material that includes, or is surrounded by, elongated ferromagnetic rods of ferrite magnetic material. The fact that Sasaki mentions that the core wire 11 can be either electrically conductive or electrically nonconductive is insignificant to the extent that the *overall integral structure* of the core wire 11 (shown in Sasaki's Figs. 1a and 2a) includes materials of an intermediate element and ferromagnetic material such that these core wires can be read as being equivalent to the overall structure of "ferromagnetic rods". Therefore, the examiner's position is that Sasaki fully satisfies the limitations of "providing...rods" (lines 3-4 of Claim 7).

It appears that further limitations defining the interconnection between the "intermediate element" and the "ferromagnetic rods" are needed to avoid Sasaki.

In response to applicant's argument that the secondary reference of Rudd does not teach ferromagnetic rods between the dielectric, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this

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case, Rudd was relied upon for the problems associated with slicing, cleaning and molding dielectrics of magnetic rods.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

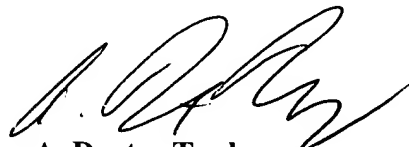
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 703-308-7599. The examiner can normally be reached on Monday - Friday 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



A. Dexter Tugbang
Primary Examiner
Art Unit 3729

March 8, 2004